## UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION WASHINGTON, DC 20591

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In the matter of the petition of

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THE LONE STAR FLIGHT MUSEUM

\* Regulatory Docket No. 26523

for an exemption from Sections 45.25 and 45.29 of the Federal Aviation Regulations

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## GRANT OF EXEMPTION

By letter dated March 15, 1991, Mr. Ralph S. Royce, Administrator of the Lone Star Flight Museum, petitioned for an exemption from Sections 45.25 and 45.29 of the Federal Aviation Regulations (FAR) to permit aircraft owned and operated by the Lone Star Flight Museum, or its members, to operate with 2-inch marks in locations other than those provided by the FAR. Specifically, the petitioner requests permission to place the marks on the fuselage under the stabilizer, clear of other marks, with a suitable color so as to be recognizable as the civilian registration number.

The petitioner requires relief from the following regulations:

Section 45.25 of the FAR requires, in pertinent part, that fixed-wing aircraft display the required registration marks on either the vertical tail surfaces or the sides of the fuselage, and that marks on the fuselage must be located between the trailing edge of the wing and the leading edge of the horizontal stabilizer.

Section 45.29 of the FAR requires, in pertinent part, that fixed-wing aircraft must carry registration marks at least 12 inches high unless they carried 2-inch marks prior to November 1, 1981, or were manufactured after November 2, 1981, but before January 1, 1983, in which case they may carry 2-inch marks until the aircraft is repainted or the marks are repainted, restored, or changed.

The petitioner supports its requests with the following information:

The petitioner represents an organization which promotes the restoration and public display of historically significant aircraft, or replicas of such aircraft, and estimates that less than 30 aircraft, belonging to the museum and its members, are involved.

The petitioner states that the proper paint scheme is important to authentic restoration and that this effort is often hampered by the registration marks display requirements of FAR Part 45.

Specifically, FAR 45.25, requiring marks to be displayed on the fuselage sides between the trailing edge of the wing and the leading edge of the stabilizer, and FAR 45.29, requiring 12-inch marks, are those regulations which present the greatest obstacles.

The petitioner suggests that a satisfactory alternative is to locate 2-inch registration marks on the aft fuselage sides under the horizontal stabilizer. This alternative would not interfere with the historically accurate paint schemes and would provide a positive identification of the aircraft as needed. The petition cites that this alternate location is currently in use on aircraft meeting the conditions of FAR 45.22.

The petitioner urges that granting this request would not detract from safety aspects as all the aircraft are clearly recognizable from the military marks which are often larger than civilian marks. Also, these marks are easily identifiable from great distances.

The petitioner observes that this request is analogous in intent, detail, and scope to that made by the Experimental Aircraft Association (EAA) and the Confederate Air Force (CAF) resulting in the issuance of Exemption Numbers 5019 and 5019A, respectively.

The petitioner asserts, by reference to Exemption No. 5019, that the public interest will be served by permitting the museum to maintain a historic record in its most authentic form. Also, it would contribute to the economic growth of the United States by promoting museum activity, tours, airshows, and sale of books and memorabilia.

A summary of the petition was published in the Federal Register on April 25, 1991 (56 FR 19142). Six comments were received, all in support of the proposed exemption.

The Federal Aviation Administration's (FAA) analysis/summary is as follows:

Before 1981, Part 45 permitted all fixed-wing aircraft with

a maximum design cruise speed, maximum operating limit speed, and maximum structural cruise speed of less than 180 knots true airspeed (TAS), or, if none of these speeds had been established for the aircraft, a maximum cruise speed of less than 180 knots TAS, to carry 3-inch marks.

In 1981, the FAA amended Part 45 to require aircraft to carry 12-inch registration marks located on both sides of the fuselage or vertical tail. Marks carried on the fuselage must be located between the trailing edge of the wing and the leading edge of the horizontal stabilizer. The rule excludes small (less than 12,500 pounds maximum certificated takeoff gross weight) antique (built over 30 years ago) aircraft, and aircraft with antique configurations for which an experimental certificate has been issued for operation as an exhibition or amateur-built aircraft. These aircraft may carry 2-inch marks at any location on each side of the fuselage or vertical tail.

In addition, aircraft with an experimental certificate issued for operation as an exhibition or amateur-built aircraft, and which have a maximum cruising speed, not exceeding 180 knots calibrated airspeed, may carry 3-inch marks.

Finally, aircraft which carried marks at least 2 inches high prior to November 1, 1981, and aircraft manufactured after November 2, 1981, but prior to January 2, 1983, may continue to carry those marks until the aircraft is repainted or the marks are repainted, restored, or changed. Aircraft which qualify to carry 2-inch or 3-inch marks must locate them as described in Sections 45.22 or 45.25.

Since the 1981 change requiring 12-inch marks for most aircraft, the FAA received several petitions for exemption by owners of historic military aircraft, based on arguments similar to those cited by the petitioner. The FAA denied these petitions because it determined that the public interest in positive aircraft identification outweighed the aesthetic interest in permitting a large number of aircraft to operate without registration marks or to display small marks in various, individually-determined locations. Positive aircraft identification is necessary to maintain the safety and efficiency of air traffic, to assist in enforcement of the regulations, and to ensure that law enforcement activities are not hampered by abstract descriptions of aircraft. The fact that the aircraft had an authentic military paint scheme was insufficient.

Moreover, the petitions were denied because granting them would have required the FAA to devote scarce resources to making individual evaluations of each proposed paint scheme and to generate individual records to document the multiple exemptions.

However, in the denials of previous petitions, the FAA acknowledged that the configuration of historic military aircraft and the military marks on these aircraft are fairly recognizable to members of the aviation industry and the public. The FAA also noted that exceptions to the requirements of the marking rules might be appropriate in unique circumstances.

In granting Exemption No. 5019, the FAA recognized that historic military aircraft are a unique part of the aviation community and that their preservation and display contributes to the history of aviation. The FAA agreed with the petitioners that permitting historic military aircraft owned by members of their organizations to display small marks in a specified alternate location will promote a valuable historical record without compromising positive aircraft identification.

After a thorough review of the facts and arguments presented by the EAA and CAF, the FAA determined that granting relief to members of the petitioners' organizations was in the public interest and would not adversely affect safety by compromising positive aircraft identification. The current petition parallels Exemption No. 5019 in intent and scope.

Current regulations permit small antique aircraft to display small registration marks. The FAA has not encountered any significant aircraft identification problems involving these aircraft, because of their recognizable configuration and the operational limitations imposed on them by the regulations. The petitioner notes that a limited number of aircraft, estimated to be approximately 30 aircraft nationwide, would use the exemption to display the small The FAA believes that the limited number of distinctively-painted and configured historic military aircraft that may be affected, and operational restrictions required by this exemption, will ensure that positive aircraft identification and safety is not compromised. FAA believes that the unique nature of the authentic military paint scheme will make them easily identifiable to air traffic personnel and to other individuals and entities concerned about positive aircraft identification.

To assure consistency, and to assist the FAA in administering the exemption, the FAA has imposed the same conditions and limitations applicable to Exemption 5019. These will ensure that positive and timely identification of aircraft is not compromised by permitting these aircraft to display small marks.

The FAA believes that the petitioner has the expertise to advise the FAA regarding the authenticity of the aircraft and paint schemes that may qualify under this exemption, and

to ensure the accuracy of records required by this exemption.

In summary, the FAA has considered all pertinent facts in the petitioner's request and has determined that the requested action can be taken without compromising safety and that the public interest will be served, provided the petitioner complies with certain limitations described below.

In consideration of the foregoing, I find that a grant of exemption is in the public interest and that an equivalent level of safety will be assured provided the terms of this exemption are met. Therefore, pursuant to the authority contained in Sections 307(e) and 313(a) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR Section 11.53), the Lone Star Flight Museum is granted an exemption from Sections 45.25 and 45.29 of the FAR to the extent necessary to permit the Lone Star Flight Museum, and its members, to operate their historic military aircraft with 2-inch registration marks located beneath the horizontal stabilizer.

This exemption is subject to the following conditions and limitations:

- 1. For this exemption to be applicable to a particular aircraft, that aircraft must belong to the Lone Star Flight Museum, or the owner must be a member of the Lone Star Flight Museum, and must be qualified to use the exemption according to the procedures the petitioner establishes to implement this exemption.
- 2. A copy of this exemption, and the documentation provided by the Lone Star Flight Museum to each member requesting its use shall be kept in the aircraft and, upon request, provided to the FAA by the operator of the aircraft.
- 3. The petitioner shall maintain updated records for each member utilizing this exemption, including, for each aircraft, a photograph showing the historic paint scheme, the aircraft model and serial number, and the nationality and registration number. For each aircraft, the petitioner shall provide a duplicate of this information along with a certification that, in the opinion of the petitioner, the aircraft is painted with an authentic military paint scheme, to the FAA Airmen and Aircraft Registry Division, Aircraft Registration Branch, AVN-450, P.O. Box 25082, Oklahoma City, Oklahoma 73125. The exemption shall not be valid for a particular aircraft until this information is received by the FPA.
- 4. The procedure established by the petitioner to implement this exemption shall provide for evaluation of each application to ensure that the aircraft have what is determined to be the authentic military paint schemes. Each aircraft covered by this exemption must be a make and model actually used by the military,

or the civilian model, that is 20 years old or older, painted in its original military scheme.

- 5. The petitioner's procedure shall provide for re-application and qualification in the event of transfer of aircraft title or change to the military paint scheme; it shall also provide for notifying the FAA of any persons who have abused this exemption or failed to comply with its provisions, so that the FAA may act to terminate the exemption with respect to that person.
- 6. While operating under the terms of this exemption, the aircraft may not be used to carry persons or property for compensation or hire.

This exemption shall not be construed to exempt any operator from the nationality and registration marking requirements which are otherwise applicable to the aircraft under any other provision of the FAR, including the requirement in FAR Section 45.29(h) to carry permanent or temporary 12-inch marks located in accordance with FAR Section 45.25 when operating in an Air Defense Identification Zone or Distant Early Warning Identification Zone.

This exemption terminates on September 30, 1993 unless sooner superseded or rescinded.

Issued in Washington, D.C. on September 30, 1991.

/s/ Thomas E. McSweeny
Acting Director, Aircraft Certification
Service